

VCO Control Circuit and Method of Operation

Abstract of the Invention

A VCO control circuit includes a variable delay block, a delay counter, and a tuning range selector coupled to one or more tuning circuits, e.g. one or more VCOs, an arrangement of capacitors, varactor diodes, or inductors. The variable delay block receives a reference signal and a delay signal for setting the delay amount applied to the reference signal, and in response outputs a delayed reference signal, whereby two or more different delays may be applied to the reference signal. The delay counter receives the delayed reference signal and outputs a delay counter output signal in response. The tuning range selector receives the delay counter output signal, and changes the tuning range of the one or more connected tuning circuits in response.